

*Student Learning Objective: Students model with fractions, identify fractional equations and expressions to represent a situation, and utilize mathematical operations to solve fractional expressions.*

## ABOVE STANDARD

*Students are working to solidify the following skills:*

- Multiply and divide with fractions and mixed numbers greater than 1.
- Interpret and create a variety of visual models to solve word problems.

*Educator-recommended next steps and Digital Library resources*

Instructional next steps include helping students to:

- Apply knowledge of multiplying and dividing fractions to real-world scenarios (e.g., money). Digital Library example: [Illustrative Mathematics Multiplying Fractions Model](#)
- Extend their application of adding, subtracting, multiplying, and dividing fractions to percentages. Digital Library example: [Stuffed with Pizza](#)
- Utilize visual models as tools for solving problems involving multiplying fractions. Digital Library example: [Multiply Fractions Conceptually](#)

## AT/NEAR STANDARD

*Students are working to solidify the following skills:*

- Use expressions or equations with equivalent fractions to add or subtract fractions or mixed numbers with unlike denominators.
- Understand numerators, denominators, and the part to whole relationships present in all fractions

*Educator-recommended next steps and Digital Library resources*

Instructional next steps include helping students to:

- Elicit, confront, and resolve a common misconception about adding fractions. Digital Library example: [Using Models to Critique Reasoning When Adding Fractions](#)
- Develop a conceptual understanding of adding and subtracting fractions. Digital Library example: [Adding and Subtracting Fractions](#)
- Determine which operations to use when solving problems with fractions. Digital Library example: [Inductive Set for Adding, Subtracting, Multiplying and Dividing Fractions](#)
- Practice fraction operations including adding, subtracting, multiplying and dividing in a variety of ways.

## BELOW STANDARD

*Students are working to solidify the following skills:*

- Identify a model that represents a multiplication expression of a whole number by a fraction.
- Identify a division expression that is equivalent to a given fraction.
- Make reasonable estimates using familiar fractions totaling less than 1.

*Educator-recommended next steps and Digital Library resources*

Instructional next steps include, helping students to:

- Apply whole-to-part relationships in order to compare fractions. Digital Library example: [The Great Fraction Hunt](#)
- Develop a conceptual understanding of fractions. Digital Library example: [Daily Discourse Through Fractions](#)
- Develop whole-to-part relationships and extend to solving problems with a variety of operations. Digital Library example: [Multiplying and Dividing Fractions – A Unit for Fifth Grade](#)